8. On the Genus Gouldia of C. B. Adams, and on a new Species of Crassatella. By Edgar A. Smith.

[Received March 15, 1881.]

Special attention having been called to the name Gouldia in the volume of the Society's 'Proceedings' for 1879 (p. 131) by Mr. W. H. Dall, in a communication entitled "On the Use of the generic name Gouldia in Zoology," I beg to present to the Society a few observations on the Molluscan group bearing this designation. Having recently had occasion to examine some of the shells which have been described under that name, I find that it is untenable; and therefore the genus Gouldia of Bonaparte is left free for adoption

by ornithologists.

The types of Adams's genus were two species from the West Indies, G. cerina and G. parva. Of these the former proves to be a species of Circe, and the latter a small Crassatella. This (parva), says Carpenter (Mazatlan Cat. p. 82), "bears a general resemblance to Circe minima." This, however, must be erroneous, probably a lapsus calami. He states that he examined specimens of G. parva in Mr. Cuming's collection; these, however, I cannot now find; and it appears to me that it was, in all probability, the G. cerina which he had before him, specimens of which are preserved in the Commingian collection. The latter does "bear a general resemblance to Circe minima," whilst the description of G. parva in no way accords with it, but rather characterizes one of the Crassatelloid species found in the West Indies, which have been assigned to Gouldia. C. B. Adams's description runs thus:—"Testâ Astarte affini, sed dente laterali remotâ anteriore in utrâque valvâ instructâ; pallii impressione vix vel haud sinuatâ."

These characters do not well apply to the first of his species, G. cerina; for that is very unlike an Astarte, lacking the epidermis so characteristic of that group, and having coloured markings, which, with one exception, are altogether absent in the genus referred to. I am therefore inclined to believe that the Astartoid resemblance referred to the second species, G. parva, his description being applicable to Astarte, and the shell which I refer to it certainly not unlike that genus, being compressed and strongly concentrically

ridged and sulcate.

Adams's generic diagnosis (Proc. Bost. Soc. Nat. Hist., 1845, vol. ii. p. 9) makes no mention of the hinge-ligament. In his G. cerina, however, it is semiexternal, as in Circe, whilst in his G. parva and G. pacifica it is internal, as in Crassatella. This has been pointed out by Carpenter in 1863, in his Supplementary Report on the Mollusca of the West Coast of North America, p. 544, where he observes, "It appears that Gouldia (Thetis, C. B. Ad. olim, non Sowerby, nec H. and A. Ad.) is congeneric with "Circe" minima, not with the Astartids. Prof. Adams's fresh specimens of his G. pacifica prove to have the crassatelloid internal





ligament, and represent one of the many remarkable forms of that group." Jeffreys also (Brit. Con. ii. p. 321) has pointed out the identity of *Gouldia* and *Circe*.

A List of Species which have been referred to the Genus Gouldia.

1848. Gouldia pfeifferi, Philippi. Cuba. Philippi, Zeitsch. Malakol. vol. v. p. 133 (as Astarte); Tryon, Proc. Acad. Nat. Sci. Philad. 1872, p. 249 (as Gouldia).

1857. Gouldia varians, Carpenter. Mazatlan.

Carpenter, Cat. Mazatlan, p. 83.

1845. Gouldia mactracea, Linsley. United States.
Linsley, Amer. Journ. Sci. Arts, vol. xlviii. p. 275, woodcut (as Astarte); Gould, Invert. Mass. ed. 2, 1870, p. 128, fig. 442 (as Gouldia).

1873. Gouldia isabella, Hutton. New Zealand. Hutton, Cat. Shells of New Zealand, p. 76.

= Crassatella bellula, A. Adams; Hutton, Man. New Zeal. Moll. p. 158.

1861. Gouldia dilecta, Gould. Kagosima, Japan. Gould, Proc. Bost. Soc. Nat. Hist. vol. viii. p. 32; Otia

Conch. p. 170.

1862. Gouldia fastigiata, Gould. North Carolina. Gould, Proc. Bost. Soc. Nat. Hist. vol. viii. p. 282; Otia Conch. p. 239.

1865. Gouldia australis, Angas. Port Jackson. Angas, Proc. Zool. Soc. 1865, p. 459; 1867, p. 928.

1869. Gouldia modesta, H. Adams. Gulf of Tunis. H. Adams, Proc. Zool. Soc. 1869, p. 275, pl. 19. f. 14.

1803. Gonldia minima, Montagu. Great Britain.
Montagu, Adams's Genera, vol. ii. p. 485.

1845. Gouldia cerina, C. B. Adams.

C. B. Adams, Proc. Bost. Soc. Nat. Hist. p. 9; Reeve, Conch. Icon. sp. 140 (as Venus).

1845. Gouldia parva, C. B. Adams. Jamaica. C. B. Adams, l. c. p. 9.

1841. Gouldia martinicensis, d'Orbigny.

D'Orbigny, Sagra's Hist. Cuba, vol. ii. p. 288, pl. 27. figs. 24-26 (as *Crassatella*); Adams, Gen. Moll. vol. ii. p. 485 (as *Gouldia*).

1841. Gouldia guadaloupensis, d'Orbigny.
D'Orbigny, l. c. p. 289, pl. 27. figs. 24-26 (as Crassatella); Adams, l. c. p. 485 (as Gouldia).

1852. Gouldia pacifica, C. B. Adams.

C. B. Adams, Panama Shells, p. 275.

1869. Gouldia lamellosa, Issel. Red Sea. Issel, Mal. Mar. Ross. p. 73, pl. i. fig. 7.

Of the above-named species, Gouldiæ pfeifferi, varians, mactracea, isabella, parva, martinicensis, guadaloupensis, pacifica, fastigiata, and

modesta are small forms of the genus Crassatella. Gouldia minima, cerina, australis, and perhaps dilecta, which I only know from description, prove to belong to Circe; and G. lamellosa is unknown to me. Of the former group, four species, viz. guadeloupensis, parva, mactracea, and pfeifferi, are, I believe, one and the same shell, and may retain d'Orbigny's name, which was the first published. In conclusion I will add the description of a small species of Crassatella from the west coast of Africa.

CRASSATELLA KNOCKERI, sp. nov.

Shell small, transparent whitish, angular at the beaks, rounded on the ventral margins, compressed, a little inequilateral, concentrically ribbed. Ribs strong, terminating anteriorly at the narrow shallow lunnle, and posteriorly defining a very narrow linear dorsal area separated by deep sulci rather broader than the ridges. Umbones small, smooth, hyaline, approximated; anterior and hinder dorsal slopes subequal, the former feebly concave, the latter rectilinear. Hinge consisting of two cardinal teeth in the right valve. the anterior one very conspicuous, the other very small; and two in the left of more equal size. Lateral teeth elongate, one on the posterior slope of the right valve, fitting into a corresponding groove in the left, and one on the anterior slope of the latter received by a groove in the right. Ligament placed in a cavity immediately posterior to the two cardinal teeth of the left valve, and between those of the right. Interior of valves glossy, exhibiting the external ribbing, owing to their transparency, prettily crenulated within along the ventral margin. Length from umbo to opposite margin 4½ millim. width $4\frac{1}{2}$, diam. $1\frac{1}{2}$.

Hab. Whydah, West Africa (dredged by Captain Knocker, R.N.). Although of small size, this pretty shell appears to be adult; and the crenulated inner edge of the valves indicates maturity. Its transparent texture is peculiar; and it is very stoutly costate for so

small a species.

May 3, 1881.

Professor Flower, LL.D., F.R.S., President, in the Chair.

The following papers were read:-